

Montezuma's Crown

by Arya Akhavan (February 2013)

Angles for R.I. = 1.580

43 + 10 girdles = 53 facets

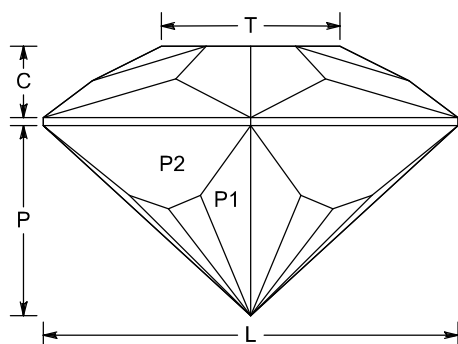
1-fold, mirror-image symmetry

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$L/W = 1.000$ $T/W = 0.431$ $U/W = 0.403$

$P/W = 0.457$ $C/W = 0.172$

$Vol./W^3 = 0.180$



PAVILION

P1	43.00°	03-09-15-21- 27-33-39-45- 51-57-63-69- 75-81-87-93	Cut to centerpoint.
G1	90.00°	27-33-39-45- 51-57-63-69	Set stone size.
G2	90.00°	12-84	Meet P1, G1
P2	70.00°	12-84	Level girdle.

CROWN

C1	40.00°	12-84	Set girdle width.
C2	40.00°	27-33-39-45- 51-57-63-69	Level girdle.
C3	35.00°	30-36-42-54- 60-66	Meet G1, C2
C4	35.00°	13-83	Meet G1, G2, C1, C2
C5	34.67°	11-85	Meet G1, C1
C6	24.04°	17-79	Meet C2, C3, C4
C7	24.00°	42-54	Meet C2, C3; C3, C6
T	0.00°	Table	Meet C3, C6, C7; C4, C5, C6

Honestly, at this point I'm just being unoriginal. I saw a similarly-shaped stone on someone's Facebook page, and decided to write my own design in this style. In a more gold color, it looks very much like an Aztec or Mayan crown. Works in materials from quartz to YAG (RI = 1.54 - 1.83) with no changes, but I prefer heliodor. Suggested width = 10-15 mm

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